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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,311	12/18/2000	Karsten Laubner	P00,1917	3334

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EXAMINER

HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/739,311

Applicant(s)

LAUBNER ET AL.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 4-8, 10 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 6, is attached to the instant Office action.

Specification

2. The abstract of the disclosure is objected to because inconsistent use of acronym, ST_N, in line 4. In the specification, VST was used for the connection selection stage (Page 8 Line 7). Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: There is a typographical error in page 6 line 15, "as describer above".

Appropriate correction is required.

Claim Objections

4. Claim 1–17 are objected to because of the following informalities: The term "time/space" is indefinite as it can mean both "time and space" and "time or space". Appropriate correction is required.
5. Claim 4 and 5 are objected to because of the following informalities: There is a comma after "N connection selection stages for a selective". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 3 recites the limitation "said space coupling unit" in line 2-3. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 13 recites the limitation "the N bypass selection stages" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claim 1-3, 9, 11, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Suda et al. (US Patent 6,330,237).

In regarding to claim 1, Suda teaches a time/space switching component with multiple functionality comprising: a time switching unit 21 for a time allocation of a plurality of data channels; a space switching unit 22 for a space allocation of said plurality of data channels; a data channel sequence correction unit 23 correcting a time sequence of said plurality of data channels; and a control unit 34 driving a unit selected from the group consisting of said time switching unit, said space switching unit and said data channel sequence correction unit dependent on a selected operating mode.

In regarding to claim 2, Suda teaches said time switching unit comprising N memory devices 31, 32 for storing said plurality of data channels of a time frame in a plurality of memory cells; and N address selection stages for a selective drive of said plurality of memory cells (Figure 3 ADR WE, ADR RE).

In regarding to claim 3, Suda teaches said space coupling unit comprising a line matrix with $N \times (N \times M)$ connecting lines; and M space switching selection stages for a selection of one of said N connecting lines dependent on said control unit (Figure 3).

In regarding to claim 9, Suda teaches said space switching selection stages as multiplexers 33.

In regarding to claim 11, Suda teaches said control unit comprising M control stages 34.

In regarding to claim 12, Suda teaches said control unit 34 driving a unit selected from the group consisting of said time switching unit 21, said space switching unit 22 and said data channel sequence correction units 23 such that, in a first operating mode, a time and space allocation of said plurality of data channels of N input lines onto M output lines occurs (Figure 3).

In regarding to claim 14, Suda teaches said control unit 34 driving a unit selected from the group consisting of said time switching unit 21, said space switching unit 22 and said data channel sequence correction units 23 such that, in a second operating mode, a correction of a data channel sequence and a space allocation of said plurality of data channels occurs from N input lines onto M output lines (Figure 4).

Allowable Subject Matter

12. Claim 4–8, 10, 13 and 15–17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the switch in general.

U.S. Patent 6,611,519 to Howe

U.S. Patent 3,851,105 to Regnier et al.

U.S. Patent 3,909,562 to Lager

U.S. Patent 4,455,645 to Mijioka et al.

U.S. Patent 4,845,704 to Georgiou et al.

U.S. Patent 5,390,178 to Hunter

U.S. Patent 5,671,213 to Kurano

U.S. Patent 6,240,063 to Suzuki

U.S. Patent 6,430,180 to Bohm et al.

U.S. Patent 6,639,920 to Sakurai et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.
Clemence Han
Examiner
Art Unit 2665


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SUPERVISORY PATENT EXAMINER
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